

APPENDIX C

DATA SOURCES AND CALCULATIONS

This appendix identifies the data sources and calculations used in this report.

1. Data Sources

The primary data used for this report came from the sources listed below.

Health and Welfare Realignment Allocation Reports

The California State Controller's Office publishes the *Health and Welfare Realignment Allocation Report* on an annual basis. These reports were used to prepare the tables on actual realignment allocations (including and excluding equity allocations), transfer payments, and total realignment allocations to the three different programs (health, mental health, and social services).

Client Data System (CDS) and Client and Service Information (CSI) System

Both of these are statistical reporting systems that include data for all clients served in treatment programs. The CDS was used from July 1985 through June 1998 when it was replaced by the CSI system. Data are collected at the individual client level and include (1) demographics such as date of birth, gender, race/ethnicity, education, and living arrangement; (2) treatment information such as amount and type of service and legal class for persons in 24-hour programs; and (3) diagnostic information. The CDS and CSI system were used to prepare tables on total clients and units, and were used with the CFRS to estimate total costs.

Medi-Cal Eligibility Data System (MEDS)

MEDS is maintained by the Department of Health Services (DHS) and includes information on over seven million people who are eligible for Medi-Cal in a year. The data include identifiers and program information as well as county code, Medi-Cal aid code, birth date, gender, race/ethnicity, and language. The MEDS data was used to prepare tables on Medi-Cal beneficiaries.

Medi-Cal Claims

Medi-Cal approved claims data are available in three different systems for the past few years. While there are some differences between the systems, the claims files and corresponding provider files all include information on the county and type of provider, client identifiers that can usually be linked to the MEDS file, diagnosis, type and amount of service, and dates of service. The Medi-Cal claims files were used to prepare tables on Medi-Cal clients, units, and approved claim amounts, including the inpatient consolidation tables.

Cost Reporting/Data Collection (CR/DC) System and Cost and Financial Reporting System (CFRS)

The Cost and Financial Reporting System (CFRS), formerly known as the Cost Reporting/Data Collection (CR/DC) System, had been used over the years as a system through which counties report their final costs following the end of the fiscal year. Each county's designated mental health agency is responsible for submitting all of its county and contract provider legal entity cost reports. The objectives of the cost report are to:

(1) compute the cost per unit for each service function; (2) determine the estimated net Medi-Cal entitlement (Federal Financial Participation) for each legal entity; (3) identify the sources of funding; and (4) serve as the basis for the local mental health agency's year-end cost settlement and Short-Doyle/Medi-Cal fiscal audit. Data in the CFRS is by county legal entity and does not have specific client information. The CFRS was used to prepare tables on revenues and, in conjunction with CDS/CSI, total estimated costs.

State Hospital Admission/Discharge/Transfer (ADT) System

This is the core system of state hospital operations and billing. The system contains information on over 5,000 persons served in state hospitals each year. The data are collected at the individual client level and include: (1) demographics such as date of birth, gender, and race/ethnicity; (2) treatment information such as number of days, diagnosis, legal class, and program; and (3) other information such as county and referral out recommendations for some clients.

Institutions for Mental Disease (IMD)

From fiscal year 1987-88 through 1991-92, the DMH maintained a billing and payment system for persons who were served in IMDs. This system included about 35 skilled nursing facilities that primarily served persons with mental disorders. Data maintained in the system includes number of clients, days, and amount paid by county. Realignment transferred the fiscal responsibility for these services to the counties as part of their realignment allocation. At that time, IMD services were no longer reported through a separate system, but through the CDS and later CSI system. This system was used to prepare tables that included IMD information in fiscal year 1990-91.

Department of Social Services Community Care Licensing Report

The California Department of Social Services licenses community care facilities. The licensing system maintains information on the name, location, license category, and capacity of each facility. This system was used to prepare tables on the number of facilities and beds by license category for each county.

Department of Finance Population Data

The California Department of Finance publishes population data for each county with age and gender detail. Specifically, the State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 1970-2040*, published in December of 1998 was used in several places in the report. The data was used to estimate the population changes by county that were used to estimate what realignment allocations would have been had they kept up with population and inflation increases. They were also used, in conjunction with the poverty population and 200% of poverty population statistics, to estimate the annual 200% of poverty population for each county and age group.

United States Census Bureau Data

Data for the population under 200% of poverty is only available by county from the census years and is not yet available from the 2000 Census. The data from the 1990 Census was applied to all four fiscal years to estimate the population under 200% of poverty.

The number of persons at the poverty level or below is available by county and by age group. The source of the data is the U.S. Census Bureau, Housing and Household

Economic Statistics Division, Small Area Estimates Branch. The age group distribution was used to estimate the number of persons under 200% of poverty for each age group.

Note that there may be differences in the counts on the tables that are from different sources. Department of Finance data include all persons in the population while data on the number of persons in poverty is based on persons in households only and would exclude persons in institutions.

2. Data Limitations

There are many limitations to the data, especially when looking at a specific service type within a specific county. To help address these concerns, the data was distributed to county mental health directors for review and comments, as well as posted on the Department of Mental Health's public website. Very few comments were received regarding changes to the data or inaccuracies in the data, so it was used as reported with some exceptions noted below. In addition, there were several other data issues that are also discussed below. These limitations need to be kept in mind when trying to draw conclusions because the data trends could be a result of a reporting error and not a mental health system effect.

Accuracy of CDS and CSI Data

Counties are required to report all county mental health treatment services to the DMH through either the CDS or CSI system (with the exception of inpatient hospital services claimed through EDS and state hospital services). However, there are no penalties for inaccurate reporting or not reporting all data. As a result, several counties had not reported any data to CSI for fiscal year 1999-2000, and there were large discrepancies between individual service function data reported through CSI versus CFRS. Some of the discrepancies were resolved through discussions with individual counties, but the majority of data was used as reported.

The underreporting primarily impacted the non-Medi-Cal data, which was calculated as the difference between the total data and the Medi-Cal data. In some cases, the total data was less than what had already been approved by Medi-Cal. Without the time to research each issue, it was assumed that there were no non-Medi-Cal services when Medi-Cal was greater than the total. This was evident in the Los Angeles County for ages 0 to 17 where there were more Medi-Cal services than total services.

Also, in some counties, the individual services reported through CDS and CSI did not correspond to the individual services reported through CFRS. An attempt was made to resolve such inconsistencies. However, individual service level data may not be as reflective of the situation in a county when compared to aggregate, higher level data.

Unduplicated Clients

The number of unduplicated clients that access services could not be determined across the different data systems. Specifically, it is not known whether the number of clients that accessed state hospital services in each of the four fiscal years also accessed other treatment services reported to CDS or CSI. The same holds true with inpatient hospital services claimed through EDS. Thus, information on clients and penetration rates only included services reported to CDS, CSI, or SD/MC. This significantly limited the ability to determine overall costs per client and true penetration rates.

Population Under 200% of Poverty

The population under 200% of poverty is referred to as the “at-risk” population for county mental health services. Some of these people qualify for Medi-Cal while others are considered indigent and receive county services based on a sliding fee scale.

Unfortunately, the U.S. Census Bureau only determines the percent of households under 200% of poverty every ten years. Thus, the 1990 data was applied to all four fiscal years.

Further, the data is not provided by age, but by percent of households. Thus, to determine the at-risk population in each age group, the ratio of poverty population by age group was applied to the total population under 200% of poverty. The net result is that increases shown in the population under 200% of poverty are simply increases in the overall population and may or may not truly reflect the population under 200% of poverty in a given county which would be impacted by county-specific economic and other factors. This also impacts the non-Medi-Cal at-risk population, which is simply the difference between the total population under 200% of poverty and the Medi-Cal population, and the total and non-Medi-Cal penetration rates.

3. Calculations

Non-Medi-Cal Data

The non-Medi-Cal data presented in the report represents the difference between the total data and the Medi-Cal data. In some counties, as a result of underreporting to CDS and CSI, the Medi-Cal data exceeded the total data, which would result in negative non-Medi-Cal data, which isn’t possible. In these cases, the non-Medi-Cal data was assumed to be zero, so total amounts don’t always equal the sum of Medi-Cal and non-Medi-Cal.

Average Annual Percent Change

The average annual percent change is calculated to show the amount of change that occurred, on average, over a year period, between the data points. The average annual percent change is different than the overall percent change between the two data points.

4. Regions

Five regions were used for this report: Bay Area, Central, Los Angeles, Southern, and Superior. The California Mental Health Directors Association (CMHDA) defines these regions. The cities and counties included in each region are shown below.

Bay Area Region

Alameda
Berkeley City
Contra Costa
Marin
Monterey
Napa
San Benito
San Francisco
San Mateo

Southern Region

Imperial
Kern
Orange
Riverside
San Bernardino
San Diego
San Luis Obispo
Santa Barbara
Tri-City

Santa Clara
Bay Area Region (cont)
Santa Cruz
Solano
Sonoma

Central Region

Alpine
Amador
Calaveras
El Dorado
Fresno
Inyo
Kings
Madera
Mariposa
Merced
Mono
Placer
Sacramento
San Joaquin
Stanislaus
Sutter-Yuba
Tulare
Yolo

Ventura
Los Angeles Region
Los Angeles

Superior Region

Butte
Colusa
Del Norte
Glenn
Humboldt
Lake
Lassen
Mendocino
Modoc
Nevada
Plumas
Shasta
Sierra
Siskiyou
Tehama
Trinity
Tuolumne

5. Service Groupings

Services were grouped into like services in order to reduce the amount of calculations. The service groupings are shown on the next page, indicating the corresponding DMH Program, Mode, and Service.

Service Groupings

Program	Mode	Service	Grouping
Administration	Contract Admin	Contract Admin	Administration
Administration	Formal Training	Formal Training	Administration
Administration	R&E	R&E	Administration
Administration	Support	Support	Administration
Administration	UR	UR	Administration
Treatment	Outpatient Services	Crisis Intervention	Crisis
Treatment	Day Services	Crisis Stabilization-ER	Crisis
Treatment	Day Services	Crisis Stabilization-Urgent Care	Crisis
Treatment	Day Services	Day Rehabilitation-1/2 Day	Day Treatment
Treatment	Day Services	Day Rehabilitation-Full Day	Day Treatment
Treatment	Day Services	Day Treatment Intensive-1/2 Day	Day Treatment
Treatment	Day Services	Day Treatment Intensive-Full Day	Day Treatment
Treatment	24-Hour Services	Hospital Administrative Days	Inpatient
Treatment	24-Hour Services	Jail Inpatient	Inpatient
Treatment	24-Hour Services	Local Hospital Inpatient	Inpatient
Treatment	24-Hour Services	PHF	Inpatient
Treatment	Outpatient Services	Professional Inpatient Visit	Inpatient
MAA	MAA	Various	MAA
Treatment	Outpatient Services	Medication Support	Medication
Treatment	Outpatient Services	Case Mgmt/Brokerage	MHS
Treatment	Outpatient Services	Mental Health Services	MHS
Treatment	Outpatient Services	Therapeutic Behavioral Health Services	MHS
Outreach	Outreach	Community Client Services	Outreach
Outreach	Outreach	Mental Health Promotion	Outreach
Treatment	24-Hour Services	Adult Crisis Residential	Residential
Treatment	24-Hour Services	Adult Residential	Residential
Treatment	24-Hour Services	Residential, Other	Residential
Treatment	24-Hour Services	MH Rehab Centers	MHRC/SNF/IMD
Treatment	24-Hour Services	IMD (with Patch)	MHRC/SNF/IMD
Treatment	24-Hour Services	IMD Basic (No Patch)	MHRC/SNF/IMD
Treatment	Day Services	SNF Augmentation	MHRC/SNF/IMD
Treatment	24-Hour Services	SNF Intensive	MHRC/SNF/IMD
Treatment	24-Hour Services	Independent Living	SSL/IL
Treatment	24-Hour Services	Semi-Supervised Living	SSL/IL
Support Services	Conservatorship	Administration	Support
Support Services	Case Mgmt Support	Case Mgmt Support	Support
Support Services	Conservatorship	Investigation	Support
Support Services	Life Support/Board & Care	Life Support/Board and Care	Support
Treatment	Day Services	Socialization	Vocational/Social.
Treatment	Day Services	Vocational Services	Vocational/Social.